TWO APPARENTLY NEW WESTERN MOTHS

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Cheteoscelis clarkei, n. sp.

Palpi white, male short to moderate, female moderate; first and second joints rough scaled, third joint short, prominent, lightly scaled; head, front rosy-brown with some white scales, vertex white; collar, tegulae and thorax green; abdomen above and below green, flecked with white, becoming white above on the last few segments, dorso-laterally white, sparingly flecked with green. Antennal shaft white, branches very light brown in the male; in the female, antennae dentate, white above, very light brown beneath. Femora on all legs short hairy greenish, tibiae inner side brown, outer white.

Primaries green, almost myrtle green, the color seems rough, the effect being caused by a minute stippling of microscopic greenish white scales over all the fore wing. Lines, two, white, narrow, distinct; t.a. line starts from the costa about two-fifths out from base of the wing, angles sharply out to subcostal vein, then making an acute angle inward, curves gently nearly parallel to the outer margin and reaches the inner margin one-third out. The t.p. line starts on costa, 1½ to 2 mm. from apex, curves nearly parallel to t.a. line reaching inner margin about three-fifths out from base of wing. The t.p. line is the more regular of the two, the t.a. line having a tendency to be rough and sometimes slightly dentate on the veins. The costa is narrowly white on the outer three-fourths, green near the base. Fringe short, white. No discal dots apparent.

Secondaries, white with a wash of green scales on the lower half of the outer third of the wing extending from tornus along the outer margin and fading out in most specimens less than half way to the costa. In most specimens a very faint fairly broad t.p. line is visible, defining the inner edge of the cloud of green scales, it runs subparallel to the outer margin from inner margin to costa. Discal dots and t.a. line wanting. There are tinges of green on inner margin and in some specimens scattered very lightly over all the secondaries. Fringe narrowly light green at base, darker green centrally, white tipped, traces of a narrow broken green line at the base.

Beneath, forewings lighter green than on the upper surface, all lines showing through indistinctly, lower half of fore wings washed with white. Secondaries fairly heavily washed with green with a white space along inner margin, extradiscal line distinct. Fringe on all wings as on upper surface of secondaries.

Expanse, male 20-26 mm.; female 24-28 mm.

Holotype, male, Split Rock Tank, Mojave Desert, California, May 19, 1938. Grace H. and John L. Sperry, collectors, No. 53438 in the collection of the U. S. National Museum, Washington, D. C.

Allotype, female, May 31, 1938, same locality and collectors and in the collection of the U. S. National Museum.

Paratypes, 38 males, 6 females, Split Rock Tank, Mojave Desert, California, May 19-31, 1938; Granite Wells, Mojave Desert, California, May 24 and 25, 1939; Grace H. and John L. Sperry, in the collections of the U. S. National Museum, Canadian National Mussum; Los Angeles Museum, Los Angeles, California, and of Grace H. and John L. Sperry, Riverside, California. One male, Morongo Valley, California, May 12, 1937; G. H. and J. L. Sperry, in the U. S. National Museum collection; 1 male, Ivanpah Mts., California, May 3, 1939; Dr. John A. Comstock, in the Los Angeles Museum.

When I first submitted this species to my friend, Dr. J. McDunnough of Ottawa, he suggested that it was probably close to *C. orthogramma* Dyar and so it has proven to be. Dr. J. F. Gates Clarke of the U. S. National Museum has been so kind as to compare this species with *orthogramma* and I take the liberty of quoting from his letter:

"Your Cheteoscelis is apparently new. I made a slide of the type of *orthagramma* Dyar and yours is not this species although it is close. The harpe of your species is much broader than that of *orthogramma* and the two long cornuti of the vesica are nearly straight and broadly separated, in *orthogramma* they are strongly curved and closely associated. The two transverse white lines of the fore wings are narrower than those of *orthogramma* and are parallel, the tegula of *orthogramma* has a narrow white inner edge, yours has no such edge."

I note also that the t.p. line of *orthogramma* starts at the costa almost at the apex, whereas in *clarkei* it starts from 1½ to 2 mm. from the apex. The under side of the abdomen in *orthogramma* appears to be light ochreous, in *clarkei* it is green. The front of the head is green in *orthogramma*, rosy brown in *clarkei*. *Clarkei* differs from *bistriaria* Packard in its smaller size and darker color, from *pectinaria* Grossbeck in the lack of the t.a. line on the secondaries and the more distinct and broader lines on the primaries.

It gives me great pleasure to name this beautiful species in honor of Dr. J. F. Gates Clarke of the U. S. National Museum, whose friendly cooperation has made the National Museum available to many of us who are prevented by distance from consulting it as often as we should like.

Euproserpinus wiesti n. sp.

Head: Front creamy ash, vertex, same in female, brownish in male; thorax and tegulae reddish brown with some light ash colored hairs in the male, light gray brown in the female; antennae black. Abdomen dark brown with a broad white encircling band covering the 4th and 5th segments. Breast white, sides brown; under side of thorax and abdomen brown except for the white encircling band and narrow white fringes marking the edges of the segments of the abdomen. Legs brown with a few white hairs covering the tibial spurs.

Primaries, ground color light tan brown with darker brown maculation. A dark brown intradiscal line starts one-fifth out on costa and curves outwardly convex to the inner margin, which it reaches at about one-third out. Preceding the intradiscal line is a narrow diffuse band of light gray scales mixed sparingly with orange, giving it a tinge of tan. Lower two-thirds of basal area is dark brown, upper one-third gray with a subcostal vein marked with brown. There is a median brown line from one-fourth out on the costa at right angles to subcostal vein, thence almost straight to inner margin at right angles at about two-fifths out. Extradiscal line from about two-thirds out on costa curves sharply inward, touching the lower end of the inwardly oblique, black discal dash, continues parallel to costa to within 1½ mm. of the median line, then turning outward at right angles to its former course goes to vein 1, then straight to inner margin. The lower portion of the space enclosed by this line and the median is dark brown with the veins outlined in gray, the upper portion is gray. Beyond the extradiscal line, near the subterminal line are two indistinct irregular light brown lines, roughly subparallel to the outer margin, and made up of tiny brown dots on the ground color of lighter scales. There is an irregular broken subterminal line edged inwardly with tan and outwardly by the broad, terminal, brown band. Fringe light gray brown.

Secondaries white with a fan of dark brown covering the basal quarter of the wing and brown terminal band along the outer margin of the wing from tornus to costa. This band is narrower than that of other species of this genus being about 1¼ mm. wide at its inner border paralleling the outer margin. Fringe white.

Beneath, primaries dirty white, the discal dash and the terminal band showing dimly through. Secondaries white with a patch of black scales covering the lower half of the basal third of the wing; terminal band distinct but lighter than on upper surface, the third nearest the tornus darker than the rest of the band. Fringes as on upper surface. No discal dot apparent on secondaries.

Expanse, male 39 mm.; female 42-48 mm.

Holotype, male, Kelsey, Colorado, May 30, 1938; Ed. B. Andrews, collector, in the collection of Grace H. and John L. Sperry, Riverside, California, through the courtesy of Dr. Wiest.

Allotype, female, same data.

Paratypes, one male; one female, same date and in the collection of Dr. Roy Wiest of Estes Park, Colorado; three females, Roggen, Colorado, May 28-29, 1939, in U. S. National Museum, Canadian National Museum, and collection of Dr. Roy Wiest.

Dr. John A. Comstock, in Bulletin So. Calif. Acad. Sci., XXXVII, 1938, page 33, has given us a very scholarly discussion of the species in this genus and I will therefore only attempt to note the differing characteristics of this species.

Wiesti is larger than *phaeton* G. & R., being 39 mm. as compared to about 31 for the male of *phaeton*; it is of brownish cast whereas *phaeton* is dark gray to black; the course of the extradiscal line and the terminal band differs markedly. *Phaeton* also lacks the broad white band ringing the abdomen in *wiesti*. *Phaeton* is also darker beneath and lacks the basal black patch present on the secondaries of *wiesti*. *Phaeton* race *mojave* Comstock is, if anything, closer but again differs markedly in fore wing maculation, lacks the white encircling band on the abdomen and the black basal patch on the under side of the secondaries, both present in *wiesti*; also the under side of the thorax, brown in *wiesti* is gray in *mojave*. *Wiesti* differs from *euterpe* Hy. Edwards in that the antennal shaft of the male is black and not white as in *euterpe*, also *euterpe* lacks the white abdominal band of *wiesti*.

It may be that this will turn out to be another form of *phaeton* but in the judgment of the author it is sufficiently different to warrant specific rating, at least until something is known about the early stages of this insect.

It gives me great pleasure to name this species in honor of my friend, Dr. Roy Wiest, enthusiastic entomologist, of Estes Park, Colorado, to whom I am indebted for many interesting specimens of Colorado Lepidoptera.